

5
Claims

1. A filter plate press with a plurality of filter plates, a resilient diaphragm being provided attached to one side only of each plate, along with means for supplying fluid at an elevated temperature between each diaphragm and the respective plate whereby to apply heat to the filter cake in the filter chambers on either side of the plate, each plate including at least a part thereof which defines, or is adjacent with, in use, the filter chamber, of a transfer material with a high thermal conductivity, such that in use heat is transferred from the elevated temperature fluid through the transfer material to the filter chamber on the opposite side of the plate.
2. A press according to claim 1, characterised in that the transfer material is steel.
3. A press according to claims 1 or 2, characterised in that the transfer material is provided as a core of the filter plate, with a covering thereon of a different material.
4. A press according to claim 3, characterised in that the covering is of rubber.
5. A method of filtration using a filter plate press according to any of claims 1 to 4, the method including supplying heated fluid between the diaphragms and respective plates to apply heat and pressure to the filter cake in the respective filter chamber, and also to supply heat to the filter chamber on the opposite side of the filter plate.
6. A method according to claim 5, characterised in that the heated fluid is hot water or steam.

6

7. A method according to claims 5 or 6, characterised in that the heated fluid is continuously recirculated during use.

8. A method according to claim 7, characterised in that the heated fluid is continuously recirculated during use.

9. A filter plate press substantially as hereinbefore described and with reference to the accompanying drawings.

10. A method of filtration using a filter plate press, the method being substantially as hereinbefore described and with reference to the accompanying drawings.

11. Any novel subject matter or combination including novel subject matter disclosed herein, whether or not within the scope of or relating to the same invention as any of the preceding claims.